

A solid, topical cosmetic composition comprising: 1. a. a swellable clay or adduct thereof, and b. a peptizing agent.

- The composition of claim 1, wherein the swellable clay is in a lattice structure 2. selected from the group consisting of pyrophillite, talc, and mixtures thereof.
- The composition of claim 1, wherein the class of swellable clays is selected from the 3. group consisting of smectite, sepiolite, zeolite, palygorskite, and mixtures thereof.
- The composition of claim 3 wherein the smectite clay is an aluminosilicate selected 4. from the group consisting of bentonite, montmorillonite, hectorite, sucinite, saponite, nontronite, vermiculite, beidellite, stevensite and synthetically made counter parts and mixtures thereof.
- The composition of claim 1 wherein the swellable clay is montmorillonite. 5.
- The composition of claim 1 wherein the adduct is prepared by treating the swellable 6. clay with a quaternary ammonium compound that binds to the clay, the quarternary ammonium compound having the structure:

$R_1R_2R_3R_4N+$

wherein

R₁, R₂, R₃ and R₄ are each independently selected from the group consisting of H, an alkyl having from about 1 to about 22 carbon atoms, an alkenyl having from about 1 to about 22 carbon atoms, and an aralkyl having from about 1 to about 22 carbon atoms, provided that at least one of the R groups is an alkyl having from about 1 to about 22 carbon atoms, an alkenyl having from about 1 to about 22 carbon atoms, or an aralkyl having from about 1 to about 22 carbon atoms.

The composition of claim 1, wherein the peptizing agent is selected from the group 7. consisting of tetrasodium pyrophosphate, tetrapotassium pyrophosphate, sodium

JBP 527

5

10

15

20

25

10

15

20

25

30



hexametaphosphate, sodium tripolyphosphate, ethylenediamine tetracetic acid, sodium silicate, sodium oxalate, sodium hydroxide, sodium carbonate, sodium polyacrylate, hydrogen peroxide, sodium citrate, alkylamido betaines, alkyl betaines, and derivatives and mixtures thereof, wherein the alkyl contains from about 8 carbon atoms to about 22 carbon atoms.

- 8. The composition of claim 1, wherein the swellable clay is a mixture of smectite with a clay selected from the group consisting of sepiolite, palygorskite, zeolite, and mixtures thereof.
- 9. The composition of claim 1, wherein the peptizing agent is present in an amount, based upon the total weight of the composition, that is greater than or equal to about 0.05% and is less than or equal to about 1%.
- 10. The composition of claim 9 wherein the clay is present in the composition in an amount, based upon the total weight of the composition, that is greater than or equal to about 2% to less than or equal to about 10%.
- 11. The composition of claim 1, wherein the weight ratio of swellable clay to peptizing agent is from about 5:1 to about 1:1.
- 12. A topical cosmetic suspension comprising:
 - a. a swellable clay or adduct thereof, and
 - b. a peptizing agent.
- 13. The composition of claim 12, wherein the swellable clay is in a lattice structure selected from the group consisting of pyrophillite, talc, or mixtures thereof.
- 14. The composition of claim 12, wherein the class of swellable clays is selected from the group consisting of smectite, sepiolite, zeolite, palygorskite, and mixtures thereof.
- 15. The composition of claim 14 wherein the smectite clay is an aluminosilicate selected from the group consisting of bentonite, montmorillonite, hectorite, sucinite, saponite,

10

15

20

25

nontronite, vermiculite, beidellite, stevensite and synthetically made counter parts and mixtures thereof.

- 16. The composition of claim 15 wherein the swellable clay is montmorillonite.
- 17. The composition of claim 12 wherein the adduct is prepared by treating the swellable clay with a quaternary ammonium compound that binds to the clay, the quarternary ammonium compound having the structure:

$R_1R_2R_3R_4N+$

wherein

R₁, R₂, R₃ and R₄ are each independently selected from the group consisting of H, an alkyl having from about 1 to about 22 carbon atoms, an alkenyl having from about 1 to about 22 carbon atoms, and an aralkyl having from about 1 to about 22 carbon atoms, provided that at least one of the R groups is an alkyl having from about 1 to about 22 carbon atoms, an alkenyl having from about 1 to about 22 carbon atoms, or an aralkyl having from about 1 to about 22 carbon atoms.

- 18. The composition of claim 12, wherein the peptizing agent is selected from the group consisting of tetrasodium pyrophosphate, tetrapotassium pyrophosphate, sodium hexametaphosphate, sodium tripolyphosphate, ethylenediamine tetracetic acid, sodium silicate, sodium oxalate, sodium hydroxide, sodium carbonate, sodium polyacrylate, hydrogen peroxide, sodium citrate, alkylamido betaines, alkyl betaines, and derivatives and mixtures thereof, wherein the alkyl contains from about 8 carbon atoms to about 22 carbon atoms.
- 19. The composition of claim 12, wherein the swellable clay is a mixture of smectite with a clay selected from the group consisting of sepiolite, palygorskite, zeolite, and mixtures thereof.
- 20. The composition of claim 12, wherein the clay is present in the composition in an amount, based upon the total weight of the composition, that is greater than or equal to about 1% to less than or equal to about 5%.

- 21. The composition of claim 12, wherein the weight ratio of swellable clay to peptizing agent is from about 5:1 to about 1:1.
- 22. A composition in the form of an oil in water emulsion comprising:
 - a. a swellable clay,
 - b. an emulsifying agent,
 - c. an oil, and
 - d. an aqueous carrier.
- 23. The composition of claim 22, wherein the swellable clay is in a lattice structure selected from the group consisting of pyrophillite, talc, and mixtures thereof.
- 24. The composition of claim 22, wherein the class of swellable clays is selected from the group consisting of smectite, sepiolite, zeolite, palygorskite, and mixtures thereof.
- 25. The composition of claim 24 wherein the smectite clay is an aluminosilicate selected from the group consisting of bentonite, montmorillonite, hectorite, sucinite, saponite, nontronite, vermiculite, beidellite, stevensite and synthetically made counter parts and mixtures thereof.
- 26. The composition of claim 25 wherein the swellable clay is montmorillonite.
- 27. The composition of claim 22 wherein the adduct is prepared by treating the swellable clay with a quaternary ammonium compound that binds to the clay, the quarternary ammonium compound having the structure:

$R_1R_2R_3R_4N+$

wherein

R₁, R₂, R₃ and R₄ are each independently selected from the group consisting of H, an alkyl having from about 1 to about 22 carbon atoms, an alkenyl having from about 1 to about 22 carbon atoms, and an aralkyl having from about 1 to about 22 carbon atoms, provided that at least one of the R groups is an alkyl having from about 1 to about 22 carbon atoms, an alkenyl having from about 1 to about 22 carbon atoms, or an aralkyl having from about 1 to about 22 carbon atoms.

20

5

10

15

10

15

20

25

- 28. The composition of claim 22, further comprising a peptizing agent selected from the group consisting of tetrasodium pyrophosphate, tetrapotassium pyrophosphate, sodium hexametaphosphate, sodium tripolyphosphate, ethylenediamine tetracetic acid, sodium silicate, sodium oxalate, sodium hydroxide, sodium carbonate, sodium polyacrylate, hydrogen peroxide, sodium citrate, alkylamido betaines, alkyl betaines, and derivatives and mixtures thereof, wherein the alkyl contains from about 8 carbon atoms to about 22 carbon atoms.
- 29. The composition of claim 22 further comprising a peptizing agent, wherein the weight ratio of the swellable clay to the peptizing agent is about 10:1 to about 1:10.
- 30. The composition of claim 29, wherein the peptizing agent is present in an amount, based upon the total weight of the composition, that is greater than or equal to about 0 % to less than or equal to about 5%.
- 31. The composition of claim 22, wherein the swellable clay is a mixture of smectite with a clay selected from the group consisting of sepiolite, palygorskite, zeolite, and mixtures thereof.
- 32. The composition of claim 22, wherein the clay is present in the composition in an amount, based upon the total weight of the composition, that is greater than or equal to about 1% to less than or equal to about 3%.
- 33. The composition of claim 22, wherein the oil is selected from the group consisting of mineral oil, lanolin, vegetable oils, and mixtures thereof.
- 34. The composition of claim 22, wherein the oil is present in the composition in an amount, based upon the total weight of the composition, that is greater than or equal to about 0.1% to less than or equal to about 10%.
- 35. The composition of claim 22, wherein the emulsifying agent is present in the composition in an amount, based upon the total weight of the composition, that is greater than or equal to about 0.1% to less than or equal to about 20%.

10

20

25

30

- 36. A method of treating or reducing enzymatic dermatitis comprising topically applying to the affected area of a mammal an effective amount of the composition of claim 1.
- 37. A method of treating or reducing enzymatic dermatitis comprising topically applying to the affected area of a mammal an effective amount of the composition of claim 12.
- 38. A method of treating or reducing enzymatic dermatitis comprising topically applying to the affected area of a mammal an effective amount of the composition of claim 22.
- 39. A method of preventing enzymatic dermatitis comprising topically applying to the affected area of a mammal an effective amount of the composition of claim 1.

A method of preventing enzymatic dermatitis comprising topically applying to the affected area of a mammal an effective amount of the composition of claim 12.

- A method of preventing enzymatic dermatitis comprising topically applying to the affected area of a mammal an effective amount of the composition of claim 22.
 - 42. An article comprised of a substrate containing the composition of claim 1.
 - 43. An article comprised of a substrate containing the composition of claim 12.
- 44. An article comprised of a substrate containing the composition of claim 22.
- 45. The article of claim 42 wherein the article is in the form of a premoistened wipe or a diaper.
- 46. The article of claim 43 wherein the article is in the form of a premoistened wipe or a diaper.

JBP 527

10

15

20

- 47. The article of claim 44 wherein the article is in the form of a premoistened wipe or a diaper.
- 48. A process for reducing the enzymatic activity of the enzymes present on the external skin comprising topically applying a composition according to claim 1.
- 49. A process for reducing the enzymatic activity of the enzymes present on the external skin comprising topically applying a composition according to claim 12.
- 50. A process for reducing the enzymatic activity of the enzymes present on the external skin comprising topically applying a composition according to claim 22.
- 51. The topical suspension of claim 12, comprised of, based upon the weight of the suspension,
 - a) about 2 % montmorillonite clay, and
 - b) about 0.2 % tetrasodium pyrophosphate.
- 52. A composition in the form of water in oil emulsion comprising:
 - a. a swellable clay,
 - b. an emulsifying agent,
 - c. an oil,
 - d. an aqueous carrier, and
 - e. a peptizing agent.

JBP 527